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WHAT IS CLAIMED IS:

1. Method for fractionating red blood cells of human blood into three fractions comprising following steps;

(a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;

- (b)separating said three layers into three individual samples; and
- (c)treating the upper layer sample with hypotonic solution for a short period and then adding hypertonic solution into said upper layer sample.
- 2. Method for producing a fraction including antibacterial red blood cells, which comprises following steps;
- (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;
- (b) separating and collecting the upper layer from the other layers; and
- (c)treating the upper layer sample with hypotonic solution for a short period and then adding hypertonic solution into said upper layer sample.
- 3. Method for producing a fraction including bacterial proliferation inhibitory red blood cells comprising following

steps;

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- (a) mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers; and
- (b)separating and collecting the intermediate layer from the other layers.
- 4. Method for producing a fraction including antibacterial red blood cells, which comprises following steps;
- (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;
- (b)separating and collecting the upper layer from the other layers;
- (c)treating the upper layer sample with hypotonic solution for a short period and then adding hypertonic solution into said upper layer sample to make isotonic solution; and
- (d)adding incubated leucocytes into said isotonic solution.
- 5. Method for producing a fraction including bacterial proliferation inhibitory red blood cells comprising following steps;
- (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;

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- (b)separating and collecting the intermediate layer from the other layers; and
- (c)adding incubated leucocytes into said intermediate layer.
- 6. Antibacterial material included in the solution produced by following steps;
 - (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;
 - (b)separating and collecting the upper layer from the other layers; and
 - (c)treating the upper layer sample with hypotonic solution for a short period and then adding hypertonic solution into said upper layer sample.
 - 7. Bacterial proliferation inhibitory material included in the solution produced by following steps;
 - (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers; and
 - (b)separating and collecting the intermediate layer from the other layers.
- 8. Antibacterial material included in the solution produced by following steps;
 - (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so

as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;

- (b)separating and collecting the upper layer from the other layers;
- 5 (c)treating the upper layer sample with hypotonic solution for a short period and then adding hypertonic solution into said upper layer sample to make isotonic solution; and
 - (d)adding incubated leucocytes into said isotonic solution.
- 9. Bacterial proliferation inhibitory material included in the solution produced by following steps;
 - (a)mixing human blood sample with dextran aqueous solution and maintaining said mixture stationarily for 60 to 75 min so as to fractionate this blood sample into three layers, the upper, intermediate, and lower layers;
 - (b)separating and collecting the intermediate layer from the other layers; and
 - (c)adding incubated leucocytes into said intermediate layer.

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